

# UNITED STATES PATENT AND TRADEMARK OFFICE

ENTTED STATES DEPARTMENT OF COMMERCE Enited States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virgnia 22313-1450 www.usplo.gev

PPLICATION NO.	E	TLING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/658,307		09/09/2003	Michiharu Yamamoto	NDTCO.022A	2141	
20995	7590	05/04/2005		EXAM	EXAMINER .	
KNOBBE	MARTE:	NS OLSON & BEA	KUGEL, TIMOTHY J			
2040 MAIN FOURTEEN				ART UNIT	PAPER NUMBER	
IRVINE. C.		•		1732		

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			1,
· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)	h
Office Action Summary	10/658,307	YAMAMOTO ET AL.	
Onice Action Summary	Examiner	Art Unit	
The MAN INO DATE of this communication and	Timothy J. Kugel	1712	
The MAILING DATE of this communication app Period for Reply	pears on the cover sneet wi	in the correspondence address -	
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a r y within the statutory minimum of thirt will apply and will expire SIX (6) MON e, cause the application to become AB	eply be timely filed  y (30) days will be considered timely.  THS from the mailing date of this communication  ANDONED (35 U.S.C. § 133).	n.
Status			
1) Responsive to communication(s) filed on			٠
,	—· s action is non-final.		
3) Since this application is in condition for allowal		ers, prosecution as to the merits is	5
closed in accordance with the practice under E			
	•		
Disposition of Claims			
4)⊠ Claim(s) <u>1-24</u> is/are pending in the application	•		
4a) Of the above claim(s) is/are withdraw	wn from consideration.		
5) Claim(s) is/are allowed.	•		
6) Claim(s) is/are rejected.			-
7) Claim(s) is/are objected to.			
8) Claim(s) <u>1-24</u> are subject to restriction and/or	election requirement.		
Application Papers			
9) The specification is objected to by the Examine	er.		
10)☐ The drawing(s) filed on is/are: a)☐ acc		by the Examiner.	
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the correct	- · · · · · · · · · · · · · · · · · · ·		d).
11) The oath or declaration is objected to by the Ex			
Priority under 35 U.S.C. § 119			
		440(-) (-1) - (0	
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. §	119(a)-(d) or (f).	
a) ☐ All b) ☐ Some * c) ☐ None of:			
1. Certified copies of the priority document		Usakian Nia	•
2. Certified copies of the priority document		· ·	
3. Copies of the certified copies of the prio		received in this National Stage	
application from the International Burea	, , , , , , , , , , , , , , , , , , , ,	received	
* See the attached detailed Office action for a list	or the certified copies not	IEGGIVEU.	
	•		
Attachment(s)	лП	O	
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>		Summary (PTO-413) s)/Mail Date	
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	) 5) Notice of I	nformal Patent Application (PTO-152)	
Paper No(s)/Mail Date	6) Other:	·	

Application/Control Number: 10/658,307 Page 2

Art Unit: 1712

### **DETAILED ACTION**

1. Claims 1-24 are pending as filed 9 September 2003.

### Election/Restrictions

- 2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1, 2, 13 and 15, drawn to a photorefractive composition, classified in class 252, subclass 582.
  - II. Claims 3-12 and 15-24, drawn to a photorefractive composition with a chromophore, classified in class 252, subclass 586.

The inventions are distinct, each from the other because of the following reasons:

3. Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as photorefractive composition without the added chromophore, plasticizer or sensitizer as admitted by applicant and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

## Election of Species

1

5. Should applicant elect to proceed with the claims of Invention I, claim 2 is generic to a plurality of disclosed patentably distinct species comprising the polymer of formula (i) wherein Z is represented by formula (iii) or (iv). Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

lla

6. Should applicant elect to proceed with the claims of Invention II, claims 3 and 4 are generic to a plurality of disclosed patentably distinct species comprising the chromophore represented by formula (v), (vi), (vii) or (viii). Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

llb

7. Should applicant elect to proceed with the claims of Invention II and elect the chromophore represented by formula (v) above, claims 5 and 6 are generic to a plurality of disclosed patentably distinct species comprising the chromophore wherein B in formula (v) is a group represented by formula (ix), (x) or (xi). Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

llc

8. Should applicant elect to proceed with the claims of Invention II and elect the chromophore represented by formula (vi) above, claims 7 and 8 are generic to a

plurality of disclosed patentably distinct species comprising the chromophore wherein B in formula (vi) is a group represented by formula (ix), (x) or (xi). Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

IId

9. Should applicant elect to proceed with the claims of Invention II and elect the chromophore represented by formula (vii) above, claims 9 and 10 are generic to a plurality of disclosed patentably distinct species comprising the chromophore wherein Ar in formula (vii) is phenylene, naphthalene or thiophenylene. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over

the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

lle

10. Should applicant elect to proceed with the claims of Invention II and elect the chromophore represented by formula (vii) above, claims 9 and 10 are generic to a plurality of disclosed patentably distinct species comprising the chromophore wherein G in formula (vii) is represented by formula (xii) or (xiii). Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

IIf

11. Should applicant elect to proceed with the claims of Invention II and elect the chromophore represented by formula (viii) above, claims 11 and 12 are generic to a plurality of disclosed patentably distinct species comprising the chromophore wherein Ar in formula (viii) is phenylene, naphthalene or thiophenylene. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Application/Control Number: 10/658,307 Page 7

Art Unit: 1712

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

llg

12. Should applicant elect to proceed with the claims of Invention II and elect the chromophore represented by formula (viii) above, claims 11 and 12 are generic to a plurality of disclosed patentably distinct species comprising the chromophore wherein G in formula (viii) is represented by formula (xii) or (xiii). Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

13. A telephone call was made to Katsuhiro Arai on 26 April 2005 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

14. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Kugel whose telephone number is (571) 272-1460. The examiner can normally be reached on 6:30 AM - 3:30 PM Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

Application/Control Number: 10/658,307

Art Unit: 1712

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

RANDY GULAKOWSKI SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1700 Page 9

1